

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method comprising:
determining a present need to pause traffic flow to a network device, the traffic flow comprising one or more digital data packets, each of the one or more digital data packets including a priority level, the priority level indicating a relative level of importance of timely delivery of the digital data packet to the network device; and
responsive to the determining,
placing in a type/length field in a frame, a value signifying the frame indicates that
traffic flow to the network device should be paused;
placing in an opcode field in the frame, a value signifying that traffic flow to the
network device should be paused or not paused according to its priority level;
creating a priority mask field in the frame; and
placing in the priority mask field, a value signifying which priority levels should be
paused.
2. (Currently Amended) The method of claim 1, wherein the ~~placing in an opcode field in the frame includes placing a value signifying that traffic flow to the network device should be paused or not paused according to its priority level, and~~ value further indicates that that the pausing will be for time indicated by a pause time field in the frame without regard for the priority level, ~~in an opcode field in the frame~~ if it is desired to use the same pause time for each priority level.

3. (Previously Presented) The method of claim 1, wherein the placing in an opcode field in the frame includes placing a value signifying that traffic flow to the network device should be paused or not paused according to its priority level, and that the pausing will be for times corresponding to each priority level indicated by a pause time field, in an opcode field in the frame if it is not desired to use the same pause time for each priority level.
4. (Previously Presented) The method of claim 3, further comprising:
placing a separate value for each possible priority level in the pause time field, the separate value indicating an independent pause time for each corresponding priority level.
5. (Previously Presented) The method of claim 4, wherein the pause time field is equal in size to the pause time field in a standard PAUSE frame multiplied by the number of possible priority levels.
6. (Original) The method of claim 1, wherein the frame is a PAUSE frame.
7. (Previously Presented) The method of claim 4, wherein the value signifying that the frame indicates that traffic flow to the network device should be paused is identical to values used to indicate standard PAUSE frames.
8. (Previously Presented) The method of claim 4, wherein the value signifying that traffic flow to the network device should be paused or not paused according to its priority level is a value not used by standard PAUSE frames in the opcode field.

9. (Currently Amended) A method comprising:

determining a present need to pause traffic flow to a network device, the traffic flow comprising one or more digital data packets, each of the one or more digital data packets including a priority level, the priority level indicating a relative level of importance of timely delivery of the digital data packet to the network device; and responsive to the determining,

placing in a type/length field in a frame, a value signifying that traffic flow to the network device should be paused or not paused according to its priority level; creating a priority mask field in the frame; and placing in the priority mask field, a value signifying which priority levels should be paused.

10. (Currently Amended) The method of claim 9, ~~further comprising:~~

~~placing in an opcode field in the frame, a value signifying~~ wherein the value further indicates that the pausing will be for time indicated by a pause time field in the frame without regard for the priority level, if it is desired to use the same pause time for each priority.

11. (Previously Presented) The method of claim 9, further comprising:

placing in an opcode field in the frame, a value signifying that the pausing will be for times corresponding to each priority level indicated by a pause time field if it is desired to use the same pause time for each priority.

12. (Previously Presented) The method of claim 11, further comprising:
placing in the pause time field, a separate value for each possible priority level, the separate value indicating an independent pause time for each corresponding priority level.
13. (Previously Presented) The method of claim 12, wherein the pause time field is equal in size to the pause time field in a standard PAUSE frame multiplied by the number of possible priorities.
14. (Original) The method of claim 9, wherein the frame is a PAUSE frame.
15. (Previously Presented) The method of claim 9, wherein the value signifying that traffic flow to the network device should be paused or not paused according to its priority level is a value not used by standard PAUSE frames in the type/length field.
16. (Currently Amended) A method comprising:
examining a value in a type/length field in a frame to determine if it signifies that the frame indicates that traffic flow to a network device should be paused, the traffic flow comprising one or more digital data packets, each of the one or more digital data packets including a priority level, the priority level indicating a relative level of importance of timely delivery of the digital data packet to the network device;
examining a value in an opcode field in the frame to determine if it signifies that traffic flow to the network device should be paused or not paused according to its priority level, if the value in the type/length field signified that the frame indicates that traffic flow to the network device should be paused; and

pausing traffic flow to the network device with priority levels corresponding to levels signified by a value in a priority mask field in the frame if the value in the opcode field signified that traffic flow to the network device should be paused or not paused according to its priority level and if the value in the type/length field signified that the frame indicates that traffic flow to the network device should be paused.

17. (Previously Presented) The method of claim 16, wherein the examining a value in an opcode field further comprises examining a value in the opcode field to determine if it also signifies that the pausing will be for time indicated by a pause time field in the frame without regard to priority level and the pausing traffic flow further comprises pausing traffic flow to the network device with priority levels corresponding to levels signified by a value in a priority mask field in the frame for a time period indicated by the pause time field in the frame without regard to priority level if the opcode field signifies that the pausing will be for time indicated by a pause time field in the frame without regard to priority level.
18. (Previously Presented) The method of claim 16, wherein the examining a value in an opcode field further comprises examining a value in the opcode field to determine if it also signifies that the pausing will be for times corresponding to each priority level indicated by a pause time and the pausing traffic flow further comprises pausing traffic flow to the network device with priority levels corresponding to levels signified by a value in a priority mask field in the frame for time periods indicated by a times corresponding to each priority level in a pause time field in the frame if the opcode field signifies that the pausing will be for times corresponding to each priority level indicated by a pause time.

19. (Previously Presented) The method of claim 18, wherein the times are a separate value for each possible priority level indicating an independent pause time for each corresponding priority level.

20. (Currently Amended) A method comprising:

examining a value in a type/length field in a frame to determine if it signifies that the frame indicates that traffic flow to a network device should be paused and if it signifies that traffic flow to the network device should be paused or not paused according to its priority level, the traffic flow comprising one or more digital data packets, each of the one or more digital data packets including a priority level, the priority level indicating a relative level of importance of timely delivery of the digital data packet to the network device; and

pausing traffic flow to the network device with priority levels corresponding to levels signified by a value in a priority mask field in the frame if the value in the type/length field signified that traffic flow to a network device should be paused and that traffic flow to the network device should be paused or not paused according to its priority level.

21. (Previously Presented) The method of claim 20, further comprising:

examining a value in an opcode field in the frame to determine if it signifies that the pausing will be for time indicated by a pause time field in the frame without regard to priority level; and

wherein the pausing traffic flow further comprises pausing traffic flow to the network device with priority levels corresponding to levels signified by a value in a priority mask field

in the frame for a time period indicated by the pause time field in the frame without regard to priority level if the value in the opcode field signifies that the pausing will be for time indicated by a pause time field in the frame without regard to priority level.

22. (Previously Presented) The method of claim 20, further comprising:

examining a value in the type/length field to determine if it also signifies that the pausing will be for times corresponding to each priority level indicated by a pause time; and wherein the pausing traffic flow further comprises pausing traffic flow to the network device with priority levels corresponding to levels signified by a value in a priority mask field in the frame for time periods indicated by a times corresponding to each priority level in a pause time field in the frame if the type/length field signifies that the pausing will be for times corresponding to each priority level indicated by a pause time.

23. (Previously Presented) The method of claim 22, wherein the times are a separate value for each possible priority level indicating an independent pause time for each corresponding priority level.

24. (Currently Amended) An apparatus comprising:

a pause traffic flow value-to-type/length field placer configured to, if a present need to pause traffic flow to a network device is determined, place in a type/length field in a frame, a value signifying the frame indicates that traffic flow to the network device should be paused, the traffic flow comprising one or more digital data packets, each of the one or more digital data packets including a priority level, the priority level indicating a

relative level of importance of timely delivery of the digital data packet to the network device;

a priority level based pause traffic flow value-to-opcode field placer coupled to the pause traffic flow value-to-type/length field placer and configured to place in an opcode field in the frame, a value signifying that traffic flow to the network device should be paused or not paused according to its priority level;

a priority mask field creator coupled to the priority level based pause traffic flow value-to-opcode field placer and configured to create a priority mask in the frame; and

a paused priority level value-to-priority mask field placer coupled to the priority mask field creator and configured to place in the priority mask field, a value signifying which priority levels should be paused.

25. (Previously Presented) The apparatus of claim 24, wherein the priority level based pause traffic flow value-to-opcode field placer includes a pause time without regard for priority level value-to-opcode field placer configured to place a value signifying that traffic flow to the network device should be paused or not paused according to its priority level, and that the pausing will be for time indicated by a pause time field in the frame without regard for the priority level, in an opcode field in the frame if it is desired to use the same pause time for each priority level.

26. (Previously Presented) The apparatus of claim 24, wherein the priority level based pause traffic flow value-to-opcode field placer includes a pause times corresponding to priority level value-to-opcode field placer configured to place a value signifying that traffic flow to the network device should be paused or not paused according to its priority level, and that

the pausing will be for times corresponding to each priority level indicated by a pause time field, in an opcode field in the frame if it is not desired to use the same pause time for each priority level.

27. (Previously Presented) The apparatus of claim 26, further comprising:

a priority level separate value-to-pause time field placer coupled to the priority level based pause traffic flow value-to-opcode field placer configured to place a separate value for each possible priority level in the pause time field, the separate value indicating an independent pause time for each corresponding priority level.

28. (Currently Amended) An apparatus comprising:

a priority level based pause traffic flow value-to-type/length field placer configured to, if a present need to pause traffic flow to a network device is determined, place in a type/length field in a frame, a value signifying that traffic flow to the network device should be paused or not paused according to its priority level, the traffic flow comprising one or more digital data packets, each of the one or more digital data packets including a priority level, the priority level indicating a relative level of importance of timely delivery of the digital data packet to the network device;

a priority mask field creator coupled to the priority level based pause traffic flow value-to-type/length field placer and configured to create a priority mask field in the frame; and

a paused priority level value-to-priority mask field placer coupled to the priority mask field creator and configured to place in the priority mask field, a value signifying which priority levels should be paused.

29. (Previously Presented) The apparatus of claim 28, further comprising:

a pause time without regard for priority level value-to-opcode field placer coupled to the priority level based pause traffic flow value-to-type/length field placer and configured to place in an opcode field in the frame, a value signifying that the pausing will be for time indicated by a pause time field in the frame without regard for the priority level if it is desired to use the same pause time for each priority.

30. (Previously Presented) The apparatus of claim 28, further comprising:

a pause times corresponding to priority level value-to-opcode field placer coupled to the priority level based pause traffic flow value-to-type/length field placer and configured to place in an opcode field in the frame, a value signifying that the pausing will be for times corresponding to each priority level indicated by a pause time field if it is desired to use the same pause time for each priority.

31. (Previously Presented) The apparatus of claim 30, further comprising:

a priority level separate value-to-pause time field placer coupled to the pause times corresponding to priority level value-to-opcode field placer and configured to place in the pause time field, a separate value for each possible priority level, the separate value indicating an independent pause time for each corresponding priority level.

32. (Currently Amended) An apparatus comprising:

a type/length field value examiner configured to examine a value in a type/length field in a frame to determine if it signifies that the frame indicates that traffic flow to a network device should be paused, the traffic flow comprising one or more digital data packets,

each of the one or more digital data packets including a priority level, the priority level indicating a relative level of importance of timely delivery of the digital data packet to the network device;

an opcode field value examiner coupled to the type/length field value examiner and configured to examine a value in an opcode field in the frame to determine if it signifies that traffic flow to the network device should be paused or not paused according to its priority level, if the value in the type/length field signified that the frame indicates that traffic flow to the network device should be paused; and

a priority level traffic flow pauser coupled to the opcode field value examiner configured to pause traffic flow to the network device with priority levels corresponding to levels signified by a value in a priority mask field in the frame if the value in the opcode field signified that traffic flow to the network device should be paused or not paused according to its priority level and if the value in the type/length field signified that the frame indicates that traffic flow to the network device should be paused.

33. (Currently Amended) An apparatus comprising:

a type/length field value examiner configured to examine a value in a type/length field in a frame to determine if it signifies that the frame indicates that traffic flow to a network device should be paused and if it signifies that traffic flow to the network device should be paused or not paused according to its priority level, the traffic flow comprising one or more digital data packets, each of the one or more digital data packets including a priority level, the priority level indicating a relative level of importance of timely delivery of the digital data packet to the network device; and

a priority level traffic flow pauser coupled to the type/length field value examiner and configured to pause traffic flow to the network device with priority levels corresponding to levels signified by a value in a priority mask field in the frame if the value in the type/length field signified that traffic flow to a network device should be paused and that traffic flow to the network device should be paused or not paused according to its priority level.

34. (Currently Amended) An apparatus comprising:

means for determining a present need to pause traffic flow to a network device, the traffic flow comprising one or more digital data packets, each of the one or more digital data packets including a priority level, the priority level indicating a relative level of importance of timely delivery of the digital data packet to the network device; and

means for, responsive to the determining,

placing in a type/length field in a frame, a value signifying the frame indicates that traffic flow to the network device should be paused;

placing in an opcode field in the frame, a value signifying that traffic flow to the network device should be paused or not paused according to its priority level;

creating a priority mask field in the frame; and

placing in the priority mask field, a value signifying which priority levels should be paused.

35 (Currently Amended) The apparatus of claim 34, wherein the ~~means for placing in an~~

~~opcode field in the frame includes means for placing a value signifying that traffic flow to the network device should be paused or not paused according to its priority level, and value~~

further indicates that the pausing will be for time indicated by a pause time field in the frame without regard for the priority level, ~~in an opcode field in the frame~~ if it is desired to use the same pause time for each priority level.

36. (Previously Presented) The apparatus of claim 34, wherein the means for placing a value in an opcode field in the frame includes means for placing a value signifying that traffic flow to the network device should be paused or not paused according to its priority level, and that the pausing will be for times corresponding to each priority level indicated by a pause time field, in an opcode field in the frame if it is not desired to use the same pause time for each priority level.
37. (Previously Presented) The apparatus of claim 36, further comprising:
means for placing a separate value for each possible priority level in the pause time field, the
separate value indicating an independent pause time for each corresponding priority
level.
38. (Previously Presented) The apparatus of claim 37, wherein the pause time field is equal in size to the pause time field in a standard PAUSE frame multiplied by the number of possible priority levels.
39. (Original) The apparatus of claim 34, wherein the frame is a PAUSE frame.

40. (Previously Presented) The apparatus of claim 37, wherein the value signifying that the frame indicates that traffic flow to the network device should be paused is identical to values used to indicate standard PAUSE frames.
41. (Previously Presented) The apparatus of claim 37, wherein the value signifying that traffic flow to the network device should be paused or not paused according to its priority level is a value not used by standard PAUSE frames in the opcode field.
42. (Currently Amended) An apparatus comprising:
means for determining a present need to pause traffic flow to a network device, the traffic flow comprising one or more digital data packets, each of the one or more digital data packets including a priority level, the priority level indicating a relative level of importance of timely delivery of the digital data packet to the network device; and
means for, responsive to the determining,
placing in a type/length field in a frame, a value signifying that traffic flow to the network device should be paused or not paused according to its priority level;
creating a priority mask field in the frame; and
placing in the priority mask field, a value signifying which priority levels should be paused.
43. (Currently Amended) The apparatus of claim 42, ~~further comprising:~~
~~means for placing in an opcode field in the frame, a value signifying~~ wherein the value further indicates that the pausing will be for time indicated by a pause time field in the

frame without regard for the priority level if it is desired to use the same pause time for each priority.

44. (Previously Presented) The apparatus of claim 42, further comprising:

means for placing in an opcode field in the frame, a value signifying that the pausing will be for times corresponding to each priority level indicated by a pause time field if it is desired to use the same pause time for each priority.

45. (Previously Presented) The apparatus of claim 44, further comprising:

means for placing in the pause time field, a separate value for each possible priority level, the separate value indicating an independent pause time for each corresponding priority level.

46. (Previously Presented) The apparatus of claim 45, wherein the pause time field is equal in size to the pause time field in a standard PAUSE frame multiplied by the number of possible priorities.

47. (Original) The apparatus of claim 42, wherein the frame is a PAUSE frame.

48. (Previously Presented) The apparatus of claim 42, wherein the value signifying that traffic flow to the network device should be paused or not paused according to its priority level is a value not used by standard PAUSE frames in the type/length field.

49. (Previously Presented) An apparatus comprising:

means for examining a value in a type/length field in a frame to determine if it signifies that the frame indicates that traffic flow to a network device should be paused, the traffic flow comprising one or more digital data packets, each of the one or more digital data packets including a priority level, the priority level indicating a relative level of importance of timely delivery of the digital data packet to the network device;

means for examining a value in an opcode field in the frame to determine if it signifies that traffic flow to the network device should be paused or not paused according to its priority level, if the value in the type/length field signified that the frame indicates that traffic flow to the network device should be paused; and

means for pausing traffic flow to the network device with priority levels corresponding to levels signified by a value in a priority mask field in the frame if the value in the opcode field signified that traffic flow to the network device should be paused or not paused according to its priority level and if the value in the type/length field signified that the frame indicates that traffic flow to the network device should be paused.

50. (Previously Presented) The apparatus of claim 49, wherein the means for examining a value in an opcode field further comprises means for examining a value in the opcode field to determine if it also signifies that the pausing will be for time indicated by a pause time field in the frame without regard to priority level and the means for pausing traffic flow further comprises means for pausing traffic flow to the network device with priority levels corresponding to levels signified by a value in a priority mask field in the frame for a time period indicated by the pause time field in the frame without regard to priority level if the

opcode field signifies that the pausing will be for time indicated by a pause time field in the frame without regard to priority level.

51. (Previously Presented) The apparatus of claim 49, wherein the means for examining a value in an opcode field further comprises means for examining a value in the opcode field to determine if it also signifies that the pausing will be for times corresponding to each priority level indicated by a pause time and the means for pausing traffic flow further comprises means for pausing traffic flow to the network device with priority levels corresponding to levels signified by a value in a priority mask field in the frame for time periods indicated by a times corresponding to each priority level in a pause time field in the frame if the opcode field signifies that the pausing will be for times corresponding to each priority level indicated by a pause time.

52. (Previously Presented) The apparatus of claim 51, wherein the times are a separate value for each possible priority level indicating an independent pause time for each corresponding priority level.

53. (Currently Amended) An apparatus comprising:
means for examining a value in a type/length field in a frame to determine if it signifies that the frame indicates that traffic flow to a network device should be paused and if it signifies that traffic flow to the network device should be paused or not paused according to its priority level, the traffic flow comprising one or more digital data packets, each of the one or more digital data packets including a priority level, the

priority level indicating a relative level of importance of timely delivery of the digital data packet to the network device; and

means for pausing traffic flow to the network device with priority levels corresponding to levels signified by a value in a priority mask field in the frame if the value in the type/length field signified that traffic flow to the network device should be paused and that traffic flow to the network device should be paused or not paused according to its priority level .

54. (Previously Presented) The apparatus of claim 53, further comprising:

means for examining a value in an opcode field in the frame to determine if it signifies that the pausing will be for time indicated by a pause time field in the frame without regard to priority level; and

wherein the means for pausing traffic flow further comprises means for pausing traffic flow to the network device with priority levels corresponding to levels signified by a value in a priority mask field in the frame for a time period indicated by the pause time field in the frame without regard to priority level if the value in the opcode field signifies that the pausing will be for time indicated by a pause time field in the frame without regard to priority level.

55. (Previously Presented) The apparatus of claim 53, further comprising:

means for examining a value in the type/length field to determine if it also signifies that the pausing will be for times corresponding to each priority level indicated by a pause time; and

wherein the means for pausing traffic flow further comprises means for pausing traffic flow to the network device with priority levels corresponding to levels signified by a value in a priority mask field in the frame for time periods indicated by a times corresponding to each priority level in a pause time field in the frame if the type/length field signifies that the pausing will be for times corresponding to each priority level indicated by a pause time.

56. (Previously Presented) The apparatus of claim 55, wherein the times are a separate value for each possible priority level indicating an independent pause time for each corresponding priority level.

57. (Currently Amended) A computer program storage device readable by a computer ~~machine~~, tangibly embodying a computer program of instructions executable by the computer ~~machine~~ to perform a method, the method comprising:

determining a present need to pause traffic flow to a network device, the traffic flow comprising one or more digital data packets, each of the one or more digital data packets including a priority level, the priority level indicating a relative level of importance of timely delivery of the digital data packet to the network device; and responsive to the determining,

placing in a type/length field in a frame, a value signifying the frame indicates that traffic flow to the network device should be paused;

placing in an opcode field in the frame, a value signifying that traffic flow to the network device should be paused or not paused according to its priority level;

creating a priority mask field in the frame; and

placing in the priority mask field, a value signifying which priority levels should be paused.

58. (Currently Amended) A computer program storage device readable by a computer ~~machine~~, tangibly embodying a computer program of instructions executable by the computer ~~machine~~ to perform a method, the method comprising:

determining a present need to pause traffic flow to a network device, the traffic flow comprising one or more digital data packets, each of the one or more digital data packets including a priority level, the priority level indicating a relative level of importance of timely delivery of the digital data packet to the network device; and responsive to the determining,

placing in a type/length field in a frame, a value signifying that traffic flow to the network device should be paused or not paused according to its priority level; creating a priority mask field in the frame; and placing in the priority mask field, a value signifying which priority levels should be paused.

59. (Currently Amended) A computer program storage device readable by a computer ~~machine~~, tangibly embodying a computer program of instructions executable by the computer ~~machine~~ to perform a method, the method comprising:

examining a value in a type/length field in a frame to determine if it signifies that the frame indicates that traffic flow to a network device should be paused, the traffic flow comprising one or more digital data packets, each of the one or more digital data

packets including a priority level, the priority level indicating a relative level of importance of timely delivery of the digital data packet to the network device;

examining a value in an opcode field in the frame to determine if it signifies that traffic flow to the network device should be paused or not paused according to its priority level, if the value in the type/length field signified that the frame indicates that traffic flow to the network device should be paused; and

pausing traffic flow to the network device with priority levels corresponding to levels signified by a value in a priority mask field in the frame if the value in the opcode field signified that traffic flow to the network device should be paused or not paused according to its priority level and if the value in the type/length field signified that the frame indicates that traffic flow to the network device should be paused.

60. (Currently Amended) A computer program storage device readable by a computer ~~machine~~, tangibly embodying a computer program of instructions executable by the computer ~~machine~~ to perform a method, the method comprising:

examining a value in a type/length field in a frame to determine if it signifies that the frame indicates that traffic flow to a network device should be paused and if it signifies that traffic flow to the network device should be paused or not paused according to its priority level, the traffic flow comprising one or more digital data packets, each of the one or more digital data packets including a priority level, the priority level indicating a relative level of importance of timely delivery of the digital data packet to the network device; and

pausing traffic flow to the network device with priority levels corresponding to levels signified by a value in a priority mask field in the frame if the value in the type/length

field signified that traffic flow to a network device should be paused and that traffic flow to the network device should be paused or not paused according to its priority level.

61. (New) A method comprising:

determining a present need to pause traffic to a network device; and

responsive to the determining,

placing in a type/length field in a frame, a value signifying the frame indicates that traffic flow to the network device should be paused;

placing in an opcode field in the frame, a value signifying that traffic flow to the network device should be paused or not paused according to its priority level, and that the pausing will be for time indicated by a pause time field in the frame without regard for the priority level if it is desired to use the same pause time for each priority level.

creating a priority mask field in the frame; and

placing in the priority mask field, a value signifying which priority levels should be paused.

62. (New) A method comprising:

determining a present need to pause traffic to a network device; and

responsive to the determining,

placing in a type/length field in a frame, a value signifying that traffic flow to the network device should be paused or not paused according to its priority level;

placing in an opcode field in the frame, a value signifying that the pausing will be for time indicated by a pause time field in the frame without regard for the priority level if it is desired to use the same pause time for each priority; creating a priority mask field in the frame; and placing in the priority mask field, a value signifying which priority levels should be paused.

63. (New) A method comprising:

examining a value in a type/length field in a frame to determine if it signifies that the frame indicates that traffic flow to a network device should be paused; if the value in the type/length field signified that the frame indicates that traffic flow to the network device should be paused, examining a value in an opcode field in the frame to determine if it signifies that traffic flow to the network device should be paused or not paused according to its priority level; and examining the value in the opcode field to determine if it also signifies that the pausing will be for time indicated by a pause time field in the frame without regard to priority level; pausing traffic flow to the network device with priority levels corresponding to levels signified by a value in a priority mask field in the frame if the value in the opcode field signified that traffic flow to the network device should be paused or not paused according to its priority level and if the value in the type/length field signified that the frame indicates that traffic flow to the network device should be paused; and

pausing traffic flow to the network device with priority levels corresponding to levels signified by a value in a priority mask field in the frame for a time period indicated by the pause time field in the frame without regard to priority level if the opcode field signifies that the pausing will be for time indicated by a pause time field in the frame without regard to priority level.

64. (New) A method comprising:

examining a value in a type/length field in a frame to determine if it signifies that the frame indicates that traffic flow to a network device should be paused and if it signifies that traffic flow to the network device should be paused or not paused according to its priority level;

examining a value in an opcode field in the frame to determine if it signifies that the pausing will be for time indicated by a pause time field in the frame without regard to priority level;

pausing traffic flow to the network device with priority levels corresponding to levels signified by a value in a priority mask field in the frame if the value in the type/length field signified that traffic flow to a network device should be paused and that traffic flow to the network device should be paused or not paused according to its priority level; and

pausing traffic flow to the network device with priority levels corresponding to levels signified by a value in a priority mask field in the frame for a time period indicated by the pause time field in the frame without regard to priority level if the value in the opcode field signifies that the pausing will be for time indicated by a pause time field in the frame without regard to priority level.

65. (New) An apparatus comprising:

a pause traffic flow value-to-type/length field placer configured to, if a present need to pause traffic to a network device is determined, place in a type/length field in a frame, a value signifying the frame indicates that traffic flow to the network device should be paused;

a priority level based pause traffic flow value-to-opcode field placer coupled to the pause traffic flow value-to-type/length field placer and configured to place in an opcode field in the frame, a value signifying that traffic flow to the network device should be paused or not paused according to its priority level, and that the pausing will be for time indicated by a pause time field in the frame without regard for the priority level if it is desired to use the same pause time for each priority level.

a priority mask field creator coupled to the priority level based pause traffic flow value-to-opcode field placer and configured to create a priority mask in the frame; and

a paused priority level value-to-priority mask field placer coupled to the priority mask field creator and configured to place in the priority mask field, a value signifying which priority levels should be paused.

66. (New) An apparatus comprising:

a priority level based pause traffic flow value-to-type/length field placer configured to, if a present need to pause traffic to a network device is determined, place in a type/length field in a frame, a value signifying that traffic flow to the network device should be paused or not paused according to its priority level;

a priority mask field creator coupled to the priority level based pause traffic flow value-to-type/length field placer and configured to create a priority mask field in the frame;

a paused priority level value-to-priority mask field placer coupled to the priority mask field creator and configured to place in the priority mask field, a value signifying which priority levels should be paused; and

a pause time without regard for priority level value-to-opcode field placer coupled to the priority level based pause traffic flow value-to-type/length field placer and configured to place in an opcode field in the frame, a value signifying that the pausing will be for time indicated by a pause time field in the frame without regard for the priority level if it is desired to use the same pause time for each priority.

67. (New) An apparatus comprising:

means for determining a present need to pause traffic to a network device; and

means for, responsive to the determining,

placing in a type/length field in a frame, a value signifying the frame indicates that traffic flow to the network device should be paused;

placing in an opcode field in the frame, a value signifying that traffic flow to the network device should be paused or not paused according to its priority level, and that the pausing will be for time indicated by a pause time field in the frame without regard for the priority level if it is desired to use the same pause time for each priority level.

creating a priority mask field in the frame; and

placing in the priority mask field, a value signifying which priority levels should be paused.

68. (New) An apparatus comprising:

means for determining a present need to pause traffic to a network device; and

means for, responsive to the determining,

placing in a type/length field in a frame, a value signifying that traffic flow to the

network device should be paused or not paused according to its priority level;

placing in an opcode field in the frame, a value signifying that the pausing will be for

time indicated by a pause time field in the frame without regard for the priority

level if it is desired to use the same pause time for each priority;

creating a priority mask field in the frame; and

placing in the priority mask field, a value signifying which priority levels should be

paused.

69. (New) An apparatus comprising:

means for examining a value in a type/length field in a frame to determine if it signifies that

the frame indicates that traffic flow to a network device should be paused;

means for, if the value in the type/length field signified that the frame indicates that traffic

flow to the network device should be paused,

examining a value in an opcode field in the frame to determine if it signifies that traffic

flow to the network device should be paused or not paused according to its priority

level; and

examining the value in the opcode field to determine if it also signifies that the pausing

will be for time indicated by a pause time field in the frame without regard to

priority level;

means for pausing traffic flow to the network device with priority levels corresponding to

levels signified by a value in a priority mask field in the frame if the value in the opcode

field signified that traffic flow to the network device should be paused or not paused according to its priority level and if the value in the type/length field signified that the frame indicates that traffic flow to the network device should be paused; and means for pausing traffic flow to the network device with priority levels corresponding to levels signified by a value in a priority mask field in the frame for a time period indicated by the pause time field in the frame without regard to priority level if the opcode field signifies that the pausing will be for time indicated by a pause time field in the frame without regard to priority level.

70. (New) An apparatus comprising:

means for examining a value in a type/length field in a frame to determine if it signifies that the frame indicates that traffic flow to a network device should be paused and if it signifies that traffic flow to the network device should be paused or not paused according to its priority level;

means for examining a value in an opcode field in the frame to determine if it signifies that the pausing will be for time indicated by a pause time field in the frame without regard to priority level;

means for pausing traffic flow to the network device with priority levels corresponding to levels signified by a value in a priority mask field in the frame if the value in the type/length field signified that traffic flow to a network device should be paused and that traffic flow to the network device should be paused or not paused according to its priority level; and

means for pausing traffic flow to the network device with priority levels corresponding to levels signified by a value in a priority mask field in the frame for a time period

indicated by the pause time field in the frame without regard to priority level if the value in the opcode field signifies that the pausing will be for time indicated by a pause time field in the frame without regard to priority level.